

# DEFENSE PROGRAM OFFICE FOR MISSION ASSURANCE



## Adapting CIP to the Adaptive Planning Process

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Briefing Classification:

**U N C L A S S I F I E D**



# The Six CIP Activities

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## CIP A&A Process

- ❑ Identify Mission Requirements
- ❑ Characterize infrastructure & identify critical assets
- ❑ Identify operational dependencies & supporting sites
- ❑ Assess operational impacts and risks
- ❑ Provide options and recommended courses of action for mitigation





# Mission Assurance Core Capability

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- ❑ Identify Mission Requirements
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- ❑ Identify operational dependencies & supporting sites
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**Deployment – Logistics – Communications**



**Installations – Ports – Vital Industries**

**ENERGY**



**TRANSPORTATION**



**COMMS**



**WATER**



**Infrastructures**



# Deliberate vs. Adaptive Planning

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## Deliberate Planning Process

Level of detail = Resourced UIC and Supply Classes

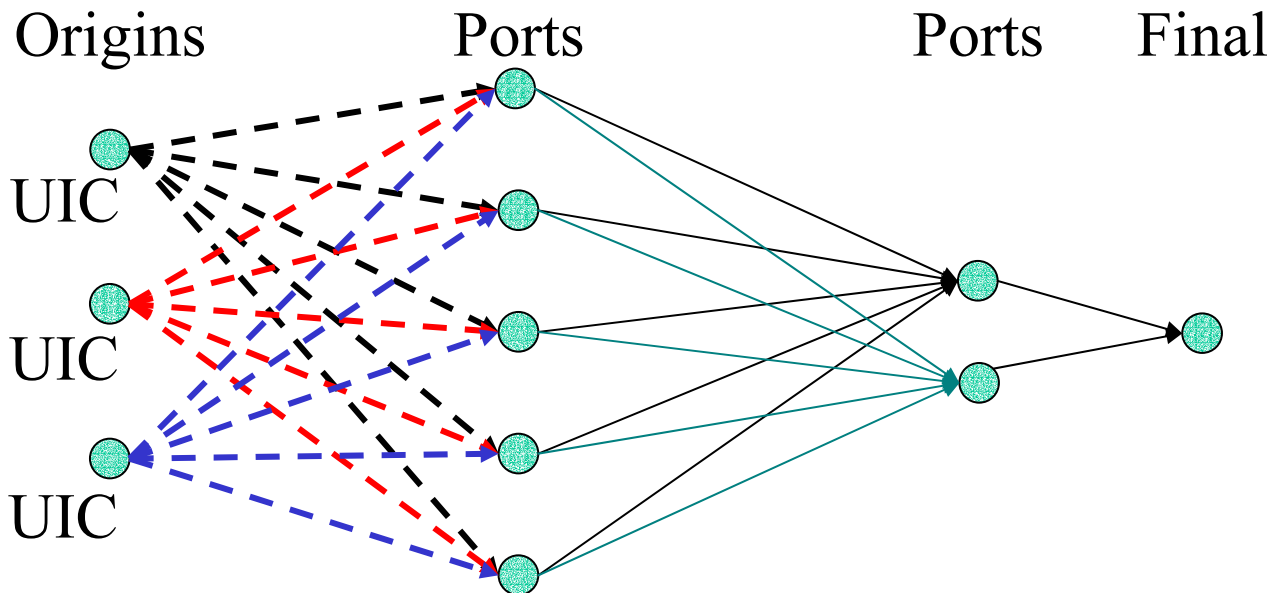
**Critical  
Resources**



## Adaptive Planning Process

Level of detail = Un-resourced UTC and Supply Classes

**Critical  
Requirements  
&  
Capabilities**





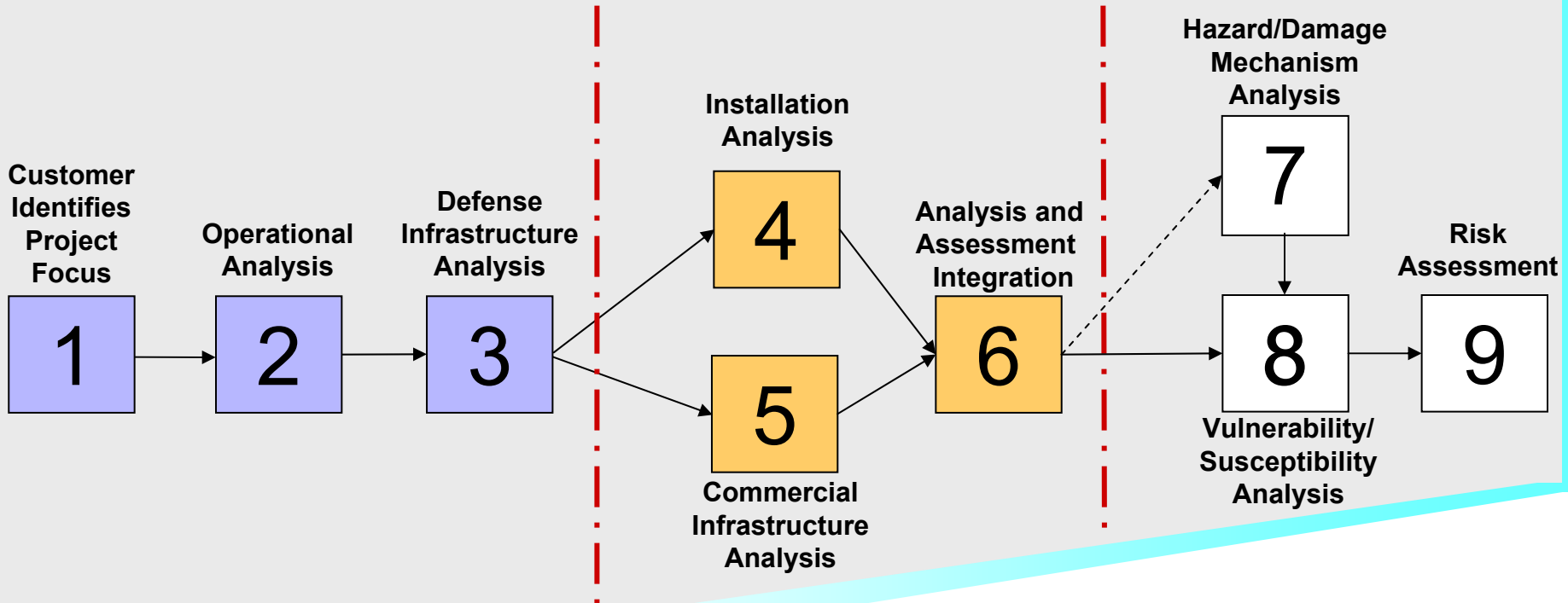
# Previous CIP A & A Methodology

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## What is critical?

## Is it Vulnerable?

## What can be done?



## Pre-Event (Planning)

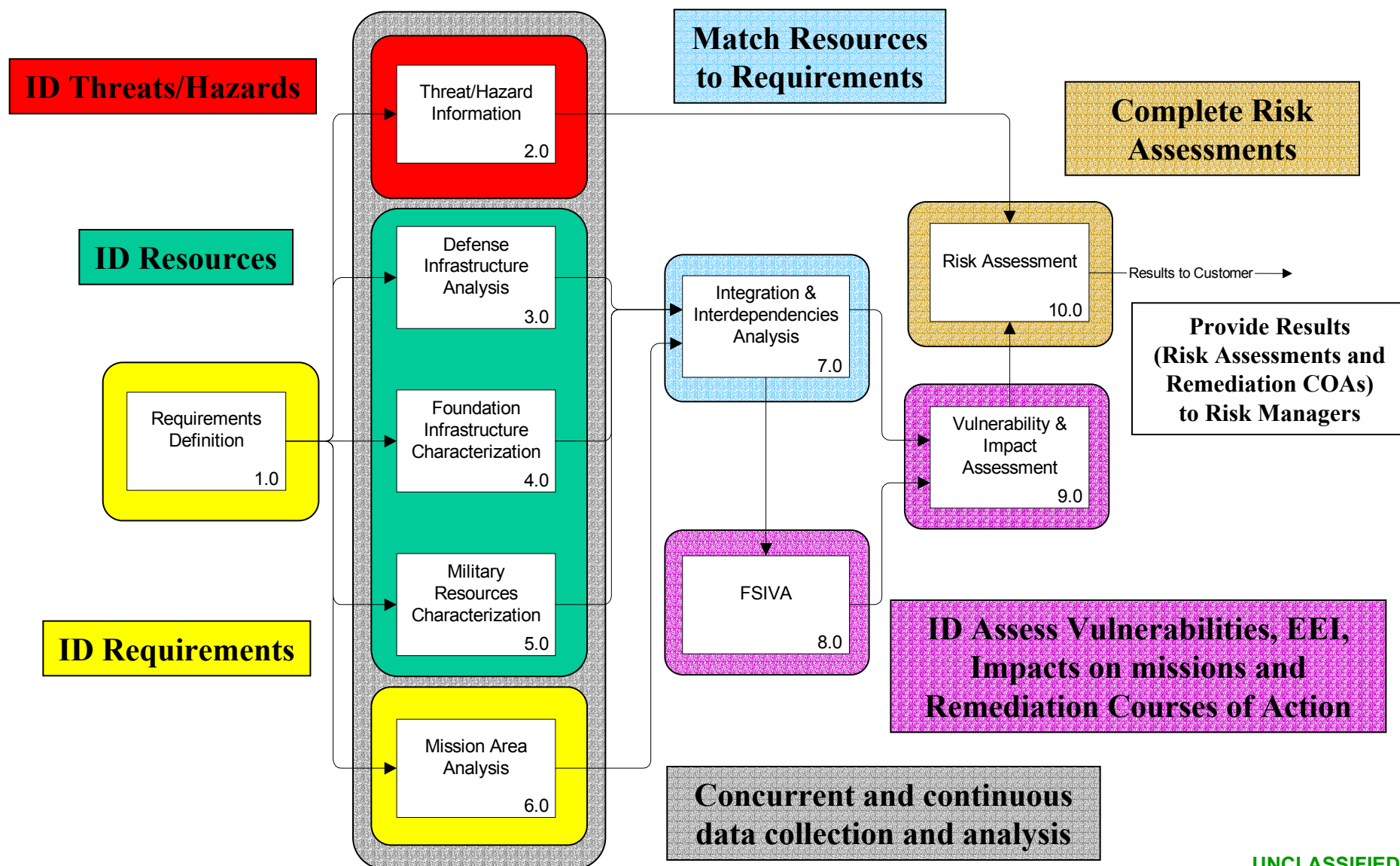
## Post-Event (Action)





# Revised CIP A&A Process

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# Pulling the Thread on A Defined Requirement

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- Determine the **critical requirements** of mission owners.
- Determine the **Mission Required Assets** (MRAs) that provide those capabilities.
- Calculate relative **Critical Index Values** (CIV) of MRAs.
- Determine the **infrastructure support requirement** of those MRAs.

**MAA**

- Identify infrastructures and determine intra and inter-dependencies.
- Develop the **critical path(s)** of supporting infrastructures -- links (requirements) and nodes (assets).
- Overlay the critical paths and calculate the **overall criticality of assets** on the path.

**Supporting Infrastructure**

- Complete **Risk Assessments** ( $\text{Risk} = \text{Impacts} * (\text{Vulnerabilities} * \text{Threats})$ ) on assets whose loss or degradation adversely impacts the mission/task/requirement.
- **Roll up the risks** to the missions/tasks/requirements of all supporting assets to the support requirement of the mission critical asset.

**Risk Assessment**

- Provide the risk assessments to risk management decision makers (mission owners and asset owners).

**Knowledge Sharing**

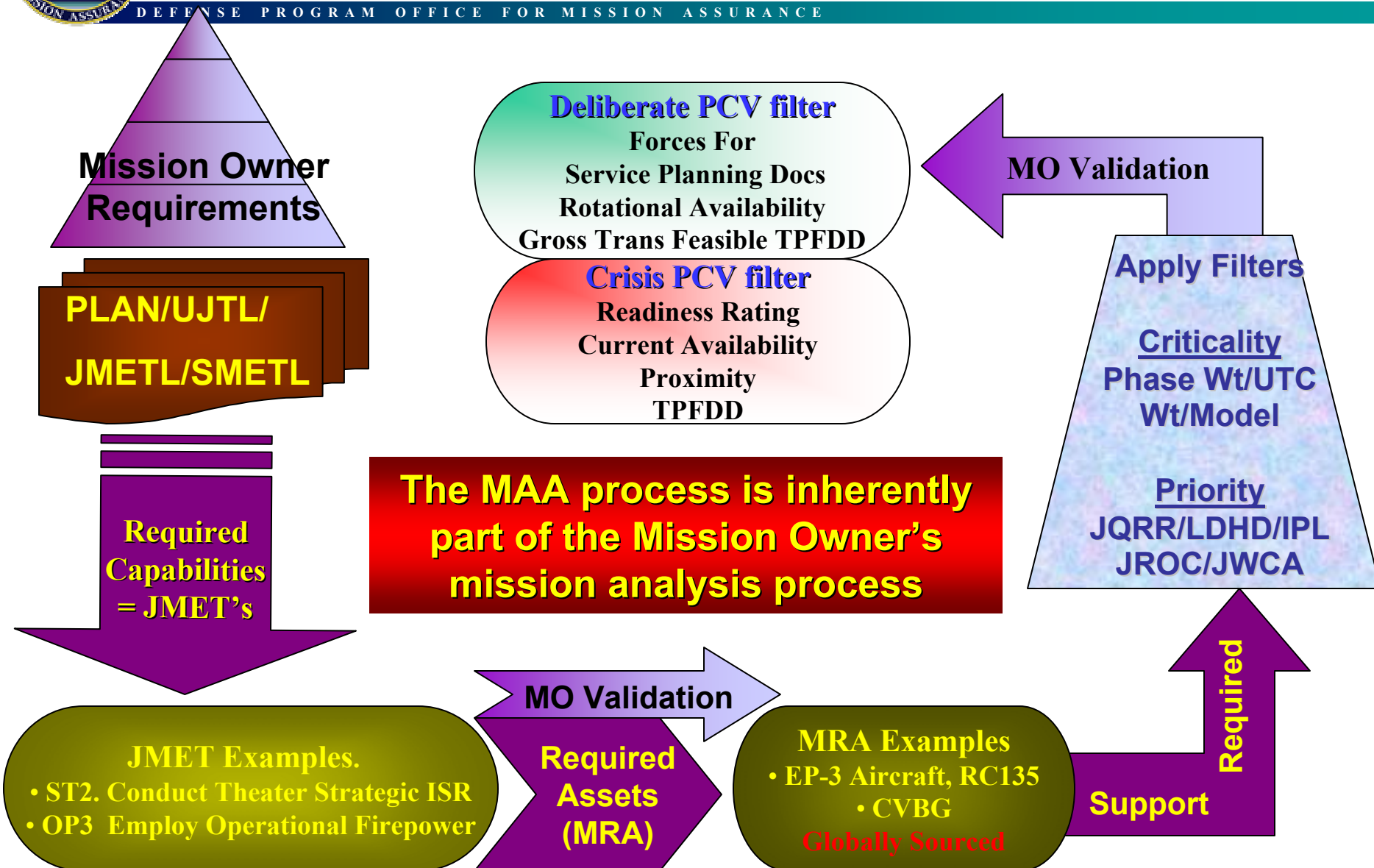




# Mission Area Analysis (MAA) to Support Adaptive Planning

Mission Area  
Analysis  
6.0

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Deploy unit from origin to final destination.

Provide information transport from Point A to Point B for secure voice.



# Determine Infrastructure Intra-dependencies

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Defense  
Infrastructure  
Analysis  
3.0

Foundation  
Infrastructure  
Characterization  
4.0

Links – Requirements/Tasks/Sub-Tasks

Nodes - Assets

**Support Requirement:**  
Deploy a mission required  
asset.

**TRANSPORTATION**

**Critical Asset:** If asset is  
lost or degraded the mission  
(support requirement) is  
degraded.

## Conduct Sector Characterization:

**Functions** -- e.g., Deployment

**Systems** -- e.g., Surface

**Assets** -- e.g., 40 foot flat car

## Develop Business Processes:

**Asset** -- e.g., 40 foot flat car

**Support Provided** -- e.g., Transport 60 STONs

**Support Required** -- e.g., Loading ramp, crane

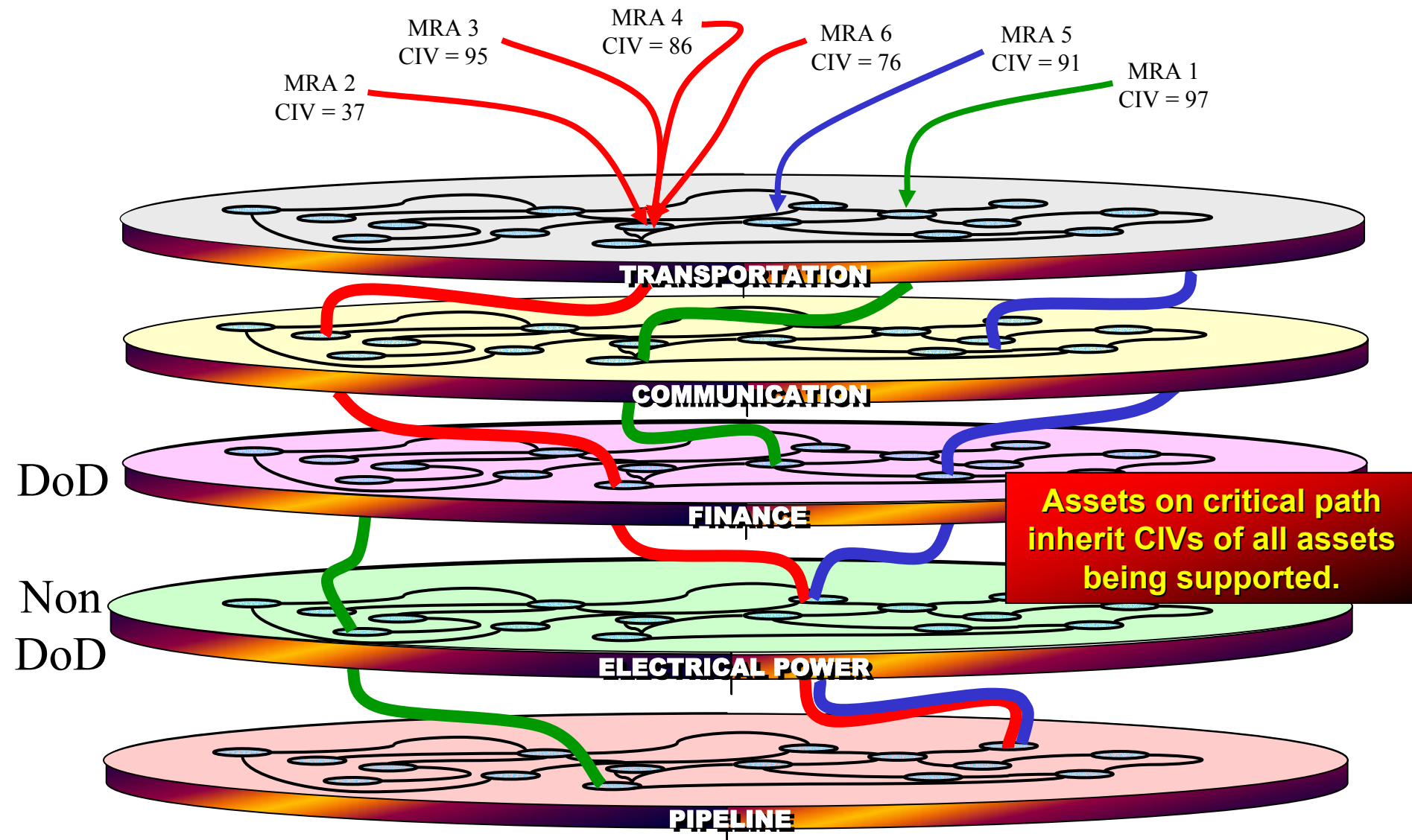
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# Determine Infrastructure Inter-dependencies

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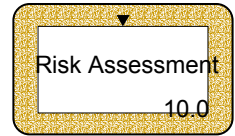
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Integration & Interdependencies Analysis  
7.0



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# Complete a Risk Assessment



**Risk:** The probability that an unwanted event will have an adverse impact on a mission or capability.

*What risk measurements are collected ?*

- Probability of events
- Severity of impacts on supported mission (Operational Impact Analysis)
- Time to recover

*How is risk calculated ?*

**Risk = Impact x (Vulnerability x Threat)**

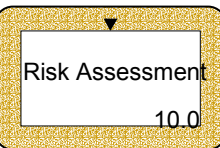
$$R = I*(V*T)$$

- All three factors are interrelated and imprecise
- If any factor on the right has a value of 'Zero' then risk is 'Zero'
- **Vulnerability** and **Threat** are intertwined and inseparable

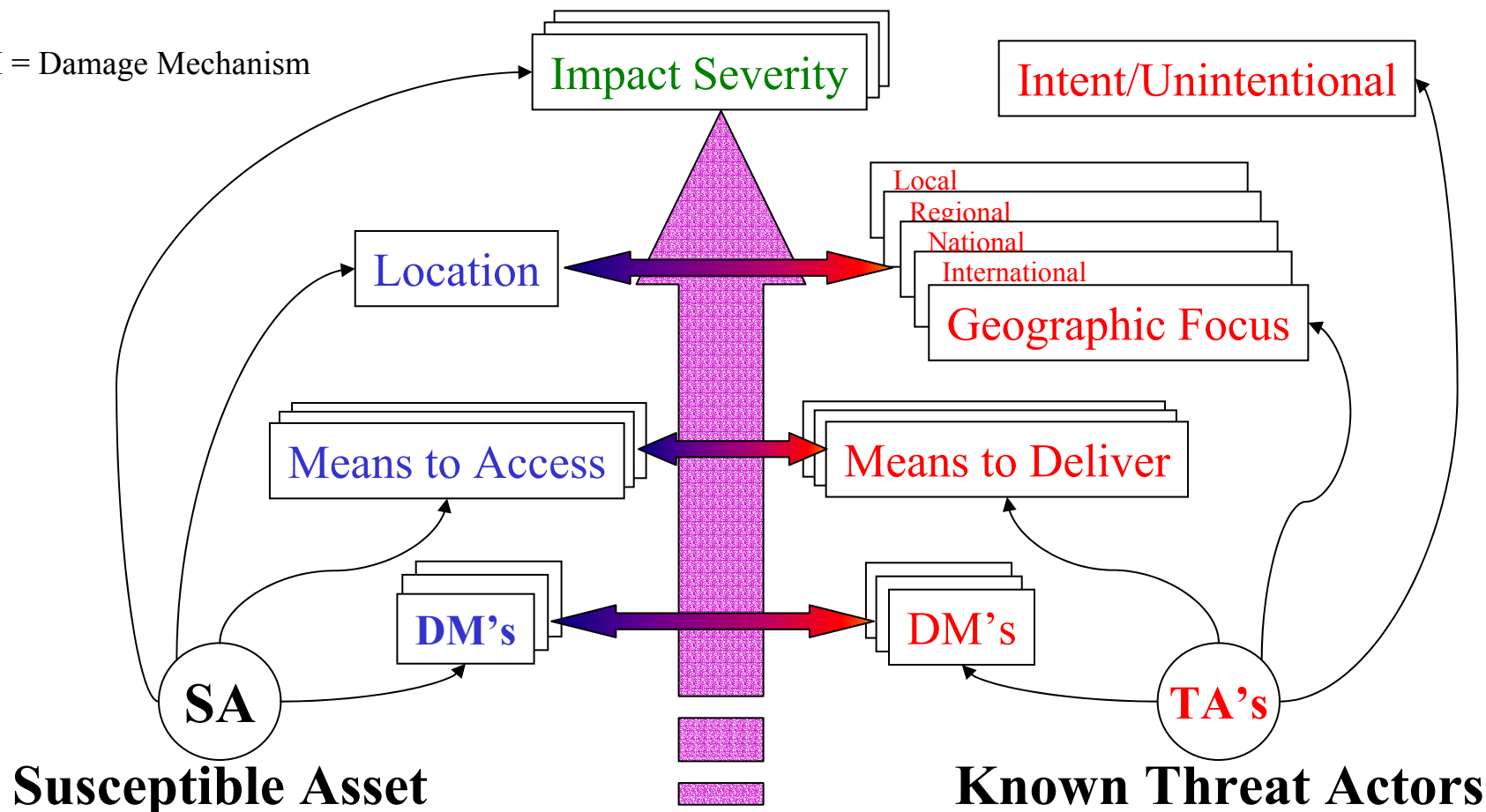


# Complete The Risk Assessment

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\* DM = Damage Mechanism



The level of **risk** increases as the number of matches between **vulnerabilities** and potential **threats** increase and the number of and severity of potential **impacts** increase.

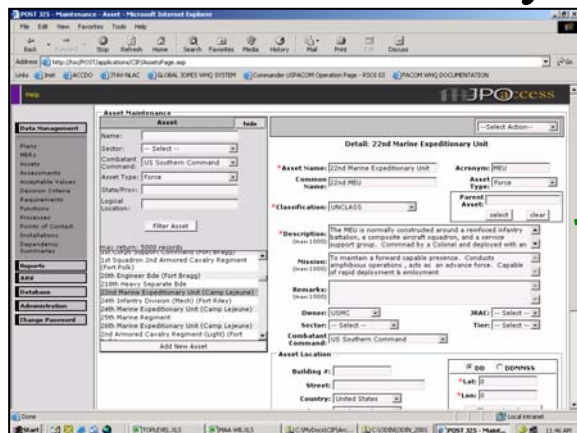




# Give Risk Managers Access to CIP Knowledge

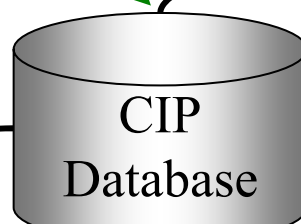
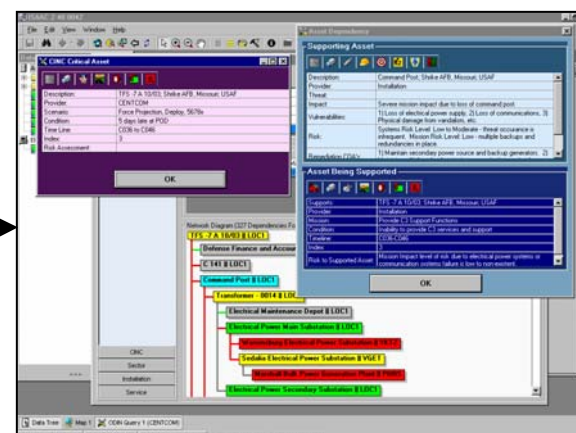
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POST – Data Entry

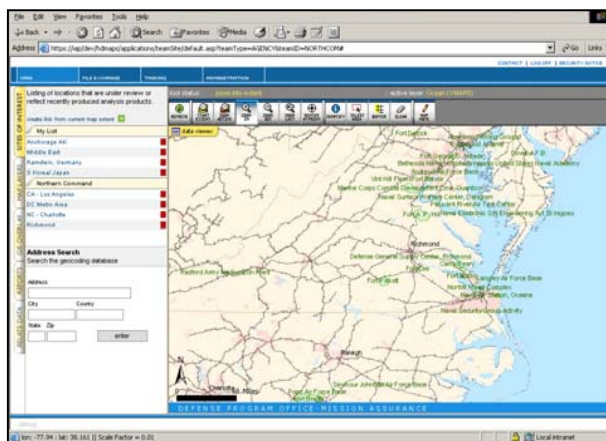


Risk Assessments  
and  
Remediation Courses of Action (COA)

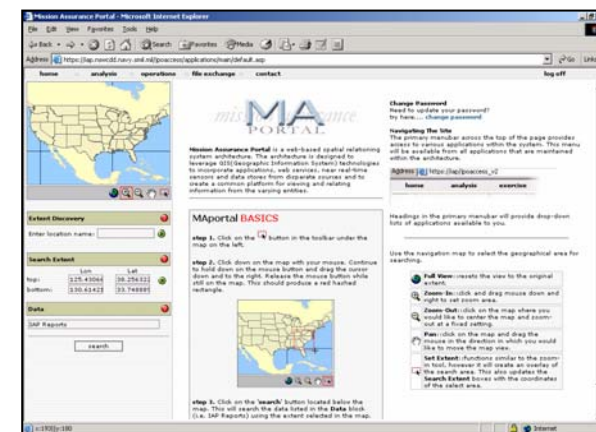
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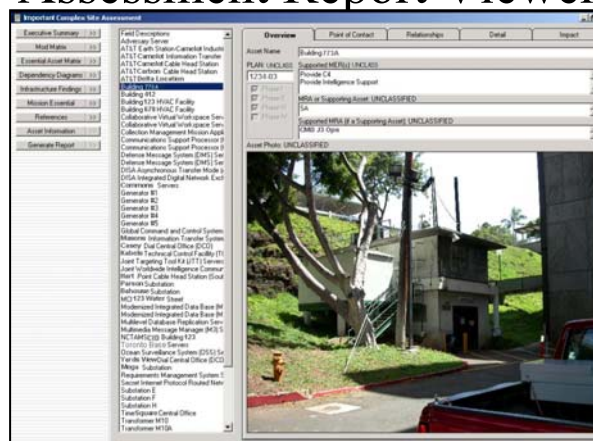
HD MAP



MA Portal



Assessment Report Viewer





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# QUESTIONS?





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